



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

May 11, 2011

Rick Brazell, Forest Supervisor:
Clearwater National Forest
12730 U.S. Highway 12
Orofino, Idaho 83544

Re: U.S. Environmental Protection Agency (EPA) comments for the Clearwater National Forest (Forest) Robo Elk Project (Project) Final Environmental Impact Statement (FEIS) and Record of Decision (ROD). (EPA Project Number: 10-019-AFS)

Dear Mr. Brazell:

This review was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

In our June 7, 2011 comments on the Draft EIS (DEIS) we assigned a Lack of Objections (LO) rating to the DEIS and noted our support for several of the Project's stated purposes and desired future conditions. This support continues and we believe the Watershed Improvements associated with the selected alternative – decommissioning system roads and decommissioning, rehabilitating and reducing the size of dispersed campsites - would result in environmental benefits.

We agreed with the DEIS's acknowledgement that excellent administration would increase the likelihood of achieving the maximum proportion of predicted environmental benefits. To better facilitate excellent administration we recommended that the FEIS include additional information on decision thresholds for Monitoring element #3. FEIS Chapter 6 sub-Part D "Comments Received and Our Response" is fully responsive to our recommendation.

Sites would be measured for areal extent of compacted and bare ground, length of unstable banks, and evidence of human waste. Bare ground areas increasing by more than 20%, unstable banks increasing more than 20%, or continuing human waste would elicit further education efforts, followed by changes in management, such as physical barriers, more intensive plantings, or requiring campers to provide portable toilets. (p. 160)

While these criteria and management responses are fully responsive to our administrative recommendation, we remain unclear why they are not incorporated into the FEIS's Monitoring Section, the ROD, or, the Biological Assessment.

Our June 7, 2011 DEIS comments also described issues associated with the DEIS's conclusion that Alternative 2 would restore soil conditions on 30 treatment units, totaling 1,850

acres. Generally, we believed and continue to believe that “Design Measures required to Mitigate Detrimental Effects” – decommissioning existing skid trails and landings, and overwintering slash – would mitigate adverse impacts to soils from proposed activities. We were unsure, however, how these design measures would ‘restore’ soil conditions. To address this issue, we recommended that the FEIS: (i) include additional information on the difference between mitigation and restoration with regard to soil conditions, (ii) further discuss how proposed design measures would restore soil conditions, and, (iii) identify any relevant science on how overwintering slash adequately provides for soil stability and soil productivity.

Our interest in scientific support for the effectiveness of the overwintering slash design measure is important because the DEIS and FEIS appear to depend on this measure – in addition to decommissioning skid trails and landings – for part of the larger conclusion that proposed activities would, in the longer term, provide soil restoration on 1,850 acres. Soil restoration on Treatment Units 11-17, all of which have existing detrimental soil disturbance of 15% or greater, appear to depend on the overwintering slash design measure alone (See EIS Table 4.1).

Regarding our recommendation – ‘include additional information on the difference between mitigation and restoration’ - your disclosure that, “Actions listed in Table 4-1 as “Design Measures” do blur the line between mitigation and restoration.” (p. 163) is responsive. The FEIS also includes a response to our recommendation – ‘further discuss how proposed design measures restore soil conditions’. The responses to comments 54 and 57 usefully describe the Forest’s justification of short-term increases in surface erosion and sediment production with longer term improvements in water infiltration, retention and growth of vegetation.

In response to our recommendation to ‘identify any relevant science supporting the effectiveness of overwintering slash to provide soil stability and productivity’, the Forest has included three new citations – Johnston, 2009¹; Baker, et al, 1989²; and, Barber and Van Lear, 1984³. We appreciate these citations and agree that they respond to our recommendation for any relevant science. Baker et al and Barber and Van Lear’s findings do suggest benefits from a few months of slash contact with the soil. This would mitigate project effects.

Baker et al and Barber and Van Lear’s findings do not appear, however, to directly support the assumption that benefits from overwintering slash would overcome the detrimental effects of proposed activities and result in an improvement of soil conditions over no-action. Consider that, according to Barber and Van Lear, decomposing logging slash acts as a slow-release fertilizer (p. 909). Similarly, findings from Baker et al indicate that there is, at least initially, no large loss of nutrients from silvicultural slash. Physical and biological degradation of cell walls and membranes is required before nutrient release becomes significant (p. 59).

¹ The relevance of this citation is unknown because there is no “Johnston, 2009” in the “References” section of the FEIS.

² Baker, T.G., G. M. Will and G. R. Oliver. 1989. Nutrient Release from Silvicultural Slash: Leaching and decomposition of *Pinus radiata* Needles. *Forest Ecology and Management*, 27:53-60.

³ Barber, B. L. and D. H. Van Lear. 1984. Weight Loss and Nutrient Dynamics in Decomposing Woody Loblolly Pine Logging Slash. *Soil Science Society of America Journal* 48:906-910.

In summary, we strongly support restoring detrimental soil conditions and recognize the overall effectiveness of the proposed mitigation and design measures for soils. Also, we believe that future NEPA analyses' estimates of the degree to which proposed mitigation and design measures for soils overcome project effects and restore soil conditions better than no-action should be more clearly described and supported with more directly relevant scientific findings. Such findings appear to be forthcoming. For example, Monitoring element #4, "Monitoring by the District Soil Scientist would occur post harvest and post fuel treatment to assess how close estimates were, whether project design measures were effective,..." would serve to more fully and directly support soil restoration estimates.

Thank you for this opportunity to comment and if you have any questions or concerns please contact me at (206) 553-1601 or by electronic mail at Reichgott.christine@epa.gov, you may contact Erik Peterson of my staff at (206) 553-6382 or by electronic mail at Peterson.erik@epa.gov.

Sincerely,



Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosure:

EPA Rating System for Draft Environmental Impact Statements



**U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action***

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment, February, 1987.